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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,483	02/05/2004	Robert S. Cooper	114.0006	4979
	7590 07/02/200 LDSTEIN PLLC	EXAMINER		
5015 SOUTHP.		KOVACEK, DAVID M		
SUITE 230 DURHAM, NC	27713-7736		ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/772,483	COOPER ET AL.
Office Action Summary	Examiner	Art Unit
	David Kovacek	2626
The MAILING DATE of this communication appeariod for Reply	pears on the cover sheet with the c	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b).	PATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on 10 № 2a) This action is <b>FINAL</b> . 2b) This 3) Since this application is in condition for alloward closed in accordance with the practice under N	s action is non-final. ince except for formal matters, pro	
Disposition of Claims		
4)  Claim(s) <u>1-16</u> is/are pending in the application 4a) Of the above claim(s) is/are withdra 5)  Claim(s) is/are allowed. 6)  Claim(s) <u>1-16</u> is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/o	wn from consideration.	
9)☐ The specification is objected to by the Examine	or	
10) The drawing(s) filed on is/are: a) accomposition and accomposition accomposition and accomposition accompositi	cepted or b) objected to by the land drawing(s) be held in abeyance. Section is required if the drawing(s) is objected to by the land drawing(s) is objected to be land drawing(s).	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureat * See the attached detailed Office action for a list	ts have been received. ts have been received in Application trity documents have been receive tu (PCT Rule 17.2(a)).	on No ed in this National Stage
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal F 6) Other:	ate

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## **DETAILED ACTION**

#### Continued Examination Under 37 CFR 1.114

- 1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/10/2008 has been entered.
- 2. This Office Action is in response to applicant's Request for Continued Examination, filed 03/10/2008, in which the applicant amends **claims 1**, **2**, **10**, and **12**, and presents arguments for patentability over the prior art.

## Response to Amendment

3. The applicant's amendments to **claims 1**, **2**, **10**, and **12** have been considered and are accepted. It is noted by the examiner that formal acceptance of the conditions of the claims is not an indication of allowability of the claims over the prior art.

Appropriate rejections are included in this Office Action in the relevant sections below.

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4. It is further noted by the examiner that the amendments to **claims 1**, **2**, **10**, and **12** substantially change the scope of the limitations of the claims as previously presented.

# Response to Arguments

5. Applicant's arguments with respect to **claims 1-16** have been considered but are moot in view of the new ground(s) of rejection.

## Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Surace (US Patent 6,334,103), disclosed in the applicant's Information Disclosure Statement, in view of Ehlen (US PG-Pub 2004/0006480), cited in a previous Office Action.

Regarding **claim 1**, Surace discloses a voice recognition system comprising:

 a plurality of modules for receiving voice inputs from a user and performing services in response to the voice inputs at least one of the plurality of modules Application/Control Number: 10/772,483

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providing a user prompt and receiving an input [phrase delimiter, recognizer, recognition manager, recognition grammar; voice activated services] (Col. 12, lines 52-56; Col. 16, lines 07-09), and

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 passing information identifying the module and information identifying a function being performed when the unrecognized input was detected (Col. 10, lines 22-35); and

It is noted by the examiner that though identification of the module and function is not explicitly disclosed by Surace, this is inherently required of any help determination system that is tailored to address problems with particular functions, such as that disclosed by Surace.

- a user information database storing user proficiency information [expert/novice rules; recognition history; prompt history]
   (Fig. 9, elements 916, 928; Col. 9, lines 13-23; Col. 13, lines 52-57; Col. 14, lines 46-62);
- the help application selecting a help prompt for
  presentation to the user subsequent to receipt of the
  unrecognized input [politeness rules determine appropriate prompt]
   (Fig. 7, element 702; Col. 10, lines 30-35, 41-50),
- the help application selecting the help prompt based upon the user's proficiency [expert/novice rules] and the information identifying the module and the function

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[determination of repeated help prompts] (Col. 9, lines 17-24; Col. 10, lines 30-35, 41-50).

Surace further implies, but does not explicitly disclose if the input is not recognized, resetting a consecutive error counter invoking a help application (Col. 10, lines 25-29) in disclosing a system that keeps a record of repeated usage of help prompts.

Surace does not explicitly disclose, but Ehlen discloses:

- resetting a consecutive error counter invoking a help application [number of problematic inputs received] (Page 3, paragraphs 0031-0033); and
- passing information identifying the module and information identifying a function being performed when the unrecognized input was detected [help tailored to the particular context required] (Page 2, paragraph 0027).

The two references are combinable because each is directed to a voice dialogue system that is operable to provide the user with helpful prompts in order to progress operation. Ehlen provides motivation to combine the references in disclosing the utility of context-dependent help prompts in order to assist the user easily integrate information provided by the system (Page 2, paragraph 0027).

Therefore, the examiner contends that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Surace using the teachings of Ehlen in order to implement a voice dialogue system that

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is operable to provide the user with helpful prompts in order to progress operation, and is further directed to utilizing context-dependent help prompts in order to assist the user in easily integrating information provided by the system.

Regarding claim 2, Surace in view of Ehlen discloses all limitations of claim 1 as applied above, and Surace does not teach, but Ehlen further discloses that the consecutive error counter is incremented each time a subsequent unrecognized input is received [tracking user requests and help requests] and selecting the help prompt is further based on utilization of the consecutive error counter count [initiating a help move based on parameters related to problematic inputs] (Page 3, paragraphs 0032-0034).

This limitation is directly related to the limitations of **claim 1** disclosed by Ehlen as applied above, and therefore the motivation to combine the references is the same for **claim 2** as applied above to **claim 1**.

Regarding claim 3, Surace in view of Ehlen discloses all limitations of claim 2 as applied above, and Surace further discloses that the user information includes information indicating the user's proficiency in using the system [expert/novice rules, Recognition history] (Fig. 9, element 916; Col. 9, lines 13-23; Col. 13, lines 52-57).

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Regarding claim 4, Surace in view of Ehlen discloses all limitations of claim 3 as applied above, and Surace further discloses that the information indicating the user's proficiency includes information indicating the user's proficiency with each function available to the user [documents subscriber's experience with a particular prompt suite] (Fig. 9, element 930; Col. 14, lines 57-65).

Regarding claim 5, Surace in view of Ehlen discloses all limitations of claim 4 as applied above, and Surace further discloses that the information indicating a user's proficiency with each function includes a function usage tally for each function, the function usage tally for a function indicating a number of times the user has successfully employed the function [selection of prompts based upon both prompt history and recognition history] (Fig. 9, elements 916, 930; Col. 14, lines 57-65; Col. 15, lines 20-28).

Regarding claim 6, Surace in view of Ehlen discloses all limitations of claim 5 as applied above, and Surace further discloses that the help application employs the function usage tally for the function being used when the unrecognized input was detected, in order to determine a user experience category for the user with respect to the function (Col. 9, lines 13-23; Col. 10, lines 25-29, 41-57).

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Regarding claim 7, Surace in view of Ehlen discloses all limitations of claim 6 as applied above, and Surace further inherently discloses that the help application determines the user experience category by selecting an experience category associated with a range of function usage tally values within which the user's function usage tally for the function falls in disclosing that the system bases prompt selection upon a combination of expert/novice rules and their application to the user's expertise as determined by data regarding the user's current session and experience across session (Col. 9, lines 13-23).

Regarding claim 8, Surace in view Ehlen discloses all limitations of claim 7 as applied above, and Surace further discloses that the help application tracks consecutive errors [requirement of negative comment] and recognition failures [failure] and selects appropriate help prompts [statement of problem or blame a third party] in the case of consecutive errors and recognition failures (Col. 9, lines 39-57).

It is additionally noted by the examiner that Ehlen also discloses a similar limitation [triggering of help move based on a plurality of user utterances)] (Page 3, paragraph 0032).

Regarding claim 9, Surace in view of Ehlen disclose all limitations of claim 8 as applied above, and Surace further discloses that the user's function usage tally [recognition history; prompt history] for a function is updated upon each successful use of that function [recognition history is maintained; prompt history documents subscriber's experience with a particular prompt suite] (Fig. 9, elements 916, 930; Col. 13, lines 52-56; Col. 14, lines 57-62; Col. 15, lines 20-28).

Regarding **claim 10**, this claim only contains limitations which are very similar to limitations previously addressed as presented in **claim 1**, and therefore this claim is rejected for the same reasons as applied above to **claim 1**.

Regarding **claims 11-13**, each of these claims only contain limitations which are very similar to limitations previously addressed as presented in **claim 7**, and therefore each of these claims is rejected for the same reasons as applied above to **claim 7**.

Regarding **claim 14**, this claim is very similar to **claim 8** and is therefore rejected for the same reasons as applied above to **claim 8**.

Regarding claim 15, Surace in view of Ehlen discloses all limitations of claim 14 as applied above, and Surace further implies that the selection of a prompt is more dependent on the number of errors or recognition failures detected as the number of consecutive errors or recognition

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failures increases in disclosing a dictation of prompt length selection based upon user experience [expert/novice rules] (Col. 9, lines 17-23) and also taking appropriate context-sensitive actions in response to a user requiring repeated help in the same session (Col. 10, lines 25-29, 41-57).

Regarding claim 16, Surace in view of Ehlen discloses all limitations of claim 15 as applied above, and Surace further discloses updating the user's function usage tally for a function upon each successful use of that function [maintaining recognition history; documenting the subscriber's experience with a particular prompt suite] (Fig. 9, elements 916, 930; Col. 13, lines 5'-56; Col. 14, lines 57-62; Col. 15, lines 20-28).

### Conclusion

- 7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
  - Hoffberg (US Patent 5,774,357) teaches a human interface using adaptive pattern recognition based on user characteristics.
  - Burke (US 2004/0070594) teaches a method and apparatus for program generation and classification based upon a usage history.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Kovacek whose telephone number is (571)270-3135. The examiner can normally be reached on M-F 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Talivaldis Ivars Smits/ Primary Examiner, Art Unit 2626

DMK, 06/30/2008